

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for allocating corresponding identity (ID) to each of a plurality of base station controllers (BSC) and each of a plurality of base transceiver stations (BTS) in an international mobile telecommunication-2000 (IMT-2000) system including the plurality of BSCs (BSC = base station controller), the plurality of BTSs and an OMC (OMC = operating and maintenance center) for managing the plurality of BSCs and the plurality of BTSs (BTS = base transceiver station), the method comprising the steps of:

a) by the OMC, determining if system initialization is performed;

b) if the system initialization is not performed, going to the step a), otherwise by the OMC, transmitting BSC ID allocation data to ~~all the~~ each of the plurality of BSCs ~~coupled to the~~ OMC and allocating corresponding specific BSC identities (IDs) and corresponding BSC group IDs to ~~all~~ each of the plurality of BSCs;

c) by each of the plurality of BSCs, receiving the BSC ID allocation data from the OMC and recognizing a corresponding specific BSC ID and a corresponding BSC group ID allocated to each BSC by analyzing the BSC ID allocation data;

d) by each of the plurality of BSCs, transmitting BTS ID allocation data to all BTSs coupled to each BSC and allocating corresponding specific BTS IDs to all the BTSs; and

e) by each of the plurality of BTSs, receiving the BTS ID allocation data from the BSC and recognizing corresponding specific BTS IDs allocated to each BTS by analyzing the BTS ID allocation data.

2. (Currently amended) The method as recited in claim 1, wherein the step b) includes the steps of:

b1) by the OMC, determining if an ~~first~~-ID allocation request signal is received from one of the plurality of BSCs;

b2) if the ~~first~~-ID allocation request signal is not received, going to the step b1), otherwise transmitting the BSC ID allocation data to the BSC that sent the ID allocation request signal and allocating a corresponding specific BSC ID and a corresponding BSC group ID to the BSC that sent the ID allocation request signal;

b3) determining if it is completely performed to allocate corresponding specific BSC IDs and corresponding BSC group IDs to all of the plurality of BSCs; and

b4) if it is not completely performed to allocate the corresponding specific BSC IDs and the corresponding BSC group IDs to all of the plurality of BSCs, going to the step b1), otherwise the OMC performing management of the plurality of BSCs based on the specific BSC IDs and the BSC group IDs that are allocated to the plurality of the BSCs.

3. (Original) The method as recited in claim 2, wherein the BSC ID allocation data are represented with 32 bits that include 8 bits for representing a BSC group ID field, 8 bits for representing a BSC ID field and 16 bits for representing a reserved field.

4. (Currently amended) The method as recited in claim 1, wherein the step d) includes the steps of:

d1) by each of the plurality of BSCs, determining if an ~~second~~-ID allocation request signal is received from one of the plurality of BTSs coupled thereto;

d2) if the ~~second~~ ID allocation request signal is not received, going to the step d1), otherwise transmitting the BTS ID allocation data to the BTS that sent the ID allocation request signal and allocating a corresponding specific BTS ID to the BTS that sent the ID allocation request signal;

d3) determining if it is completely performed to allocate corresponding specific BTS IDs to all of the plurality of BTSs coupled thereto; and

d4) if it is not completely performed to allocate the corresponding specific BTS IDs to all of the plurality of BTSs, going to the step d1), otherwise the plurality of BSCs performing management of the plurality of BTSs based on the specific BTS IDs that are allocated to the plurality of the BTSs.

5. (Currently amended) The method as recited in claim 4, wherein the BTS ID allocation data are represented with 32 bits that include 13 bits for representing a BTS ID field, 3 bits for representing ~~for~~ a BTS type field and 16 bits for representing a reserved field.

6. (New) The method of claim 5, wherein the BTS ID field comprises a BTS Group ID field.

7. (New) The method as recited in claim 1, wherein step b) includes the steps of:

b1) by the OMC, determining if an ID allocation request signal is received from one of the plurality of BSCs;

b2) if the ID allocation request signal is not received, going to step b1), otherwise transmitting BSC ID allocation data to the BSC that sent the ID allocation request signal and allocating a corresponding specific BSC ID and a corresponding BSC group ID to the BSC that sent the ID allocation request signal;

b3) determining if a corresponding specific BSC ID and a corresponding BSC group ID have been allocated to each BSC of the plurality of BSCs; and

b4) if corresponding specific BSC IDs and corresponding BSC group IDs have not been allocated to all BSCs of the plurality of BSCs, going to step b1), otherwise the plurality of BSCs performing call processing based on the specific BSC IDs and the group IDs allocated to the plurality of the BSCs.

8. (New) The method as recited in claim 1, wherein the step d) includes the steps of:

d1) by each of the plurality of BSCs, determining if an ID allocation request signal is received from one of the plurality of BTSs;

d2) if the ID allocation request signal is not received, going to step d1), otherwise transmitting BTS ID allocation data to the BTS that sent the ID allocation request signal and allocating a corresponding specific BTS ID to the BTS that sent the ID allocation request signal;

d3) determining if corresponding specific BTS IDs have been allocated to all BTSs of the plurality of BTSs; and

d4) if corresponding specific BTS IDs have not been allocated to all BTSs of the plurality of BTSs, going to step d1), otherwise the plurality of BTSs performing call processing based on the specific BTS IDs allocated to each of the plurality of the BTSs.

9. (New) The method as recited in claim 8, wherein the step d4) further comprises:

each BTS of the plurality of BTSs reading BTS-type information so as to recognize itself as a particular type of BTS, wherein each BTS reads BTS-type information stored therein.

10. (New) The method of claim 9, wherein the particular type of BTS is selected from the group consisting of: (i) a macro-type BTS, (ii) a micro-type BTS, and (iii) a pico-type BTS.